

Au al end

5

What is claimed is:

. A bioelectric simulating fishhook comprising:

an electrically conductive shank having an eye formed at an end thereof, the eye adapting the fishhook for coupling to a fishing line;

an electrically conductive bend formed at an end of the shank distal from the eye;

a point formed at an end of the bend distal from the shank; and

self-contained bioelectric simulating means which upon immersion in water produces an electromagnetic field about the fishhook to induce a strike response in fish.

2. The fishhook of claim 1 wherein said bioelectric simulating means includes:

an anodic segment, formed by an anodic material, that is located along the fishhook where said anodic segment becomes exposed to water upon immersion of the fishhook therein; and

a cathodic segment, formed by a cathodic material, that is also located along the fishhook where said cathodic segment becomes exposed to water upon immersion of the fishhook therein, and that is separated from the anodic segment.

10

- 3. The fishhook of claim 2 further comprising an insulating segment, formed by an electrically insulating material, that is located along the fishhook between said anodic segment and said cathodic segment where said insulating segment becomes exposed to water upon immersion of the fishhook therein for insulating the fishhook thereabout from electrical contact with the water.
- 4. The fishhook of claim 3 further comprising an artificial lure disposed upon the fishhook.
- 5. The fishhook of claim 4 wherein said artificial lure is made from an electrically insulating material, and both said



anodic segment and said cathodic segment are not covered by said artificial lure.

5

- 6. The fishhook of claim 4 wherein said artificial lure is made from an electrically insulating material and provides said insulating segment of the fishhook.
- 7. The fishhook of claim 3 wherein a quantity of anodic material included in the fishhook is less than a quantity of cathodic material included therein.
- 8. The fishhook of claim 3 wherein said anodic segment overcoats a comparatively heavy, electrically conductive material thereby adding weight to fishhook.
- 9. The fishhook of claim 3 wherein said anodic segment and cathodic segment are arranged along the fishhook so that during retrieval of the fishhook said anodic segment precedes said cathodic segment through water surrounding the fishhook.

- 10. The fishhook of claim 2 further comprising an artificial lure disposed upon the fishhook.
- 11. The fishhook of claim 1 further comprising an artificial lure disposed upon the fishhook.
- 12. The fishhook of claim 1 wherein said shank adjacent to the eye has an enlarged portion that is larger than said bend and other portions of said shank.
- 13. The fishhook of claim 12 wherein material forming the enlarged portion is heavier than material of said shank.
- 14. The fishhook of claim 1 having at least a pair of bends each of which has a point formed at an end of such bend distal from the shank connected thereto.

10

15. The fishhook of claim 14 wherein said bioelectric simulating means includes:

an anodic segment, formed by an anodic material, that is located along a first bend of the bends where said anodic segment becomes exposed to water upon immersion of the fishhook therein; and

a cathodic segment formed by a cathodic material, that is also located along a second bend of the bends where said cathodic segment becomes exposed to water upon immersion of the fishhook therein.

16. The fishhook of claim 15 further comprising an insulating segment, formed by an electrically insulating material, that is located about the shank between said anodic segment of the first bend and said cathodic segment of the second bend where said insulating segment becomes exposed to water upon immersion of the fishhook therein for insulating the fishhook thereabout from electrical contact with the water.

17. A bioelectric simulating artificial lure comprising: a body; and

at least one fine, electrically conductive strand, said electrically conductive strand having a section secured in said body and at least another section that protrudes out from said body, at least a section of said electrically conductive strand which protrudes from said body being treated to provide at least a portion of a self-contained bioelectric simulating means which upon immersion in water produces an electromagnetic field about the artificial lure to induce a strike response in fish.

- 18. The artificial lure of claim 17 wherein a treated section of said electrically conductive strand provides an anodic segment when said electrically conductive strand becomes exposed to water upon immersion of the artificial lure therein.
- 19. The artificial lure of claim 18 wherein a treated section of said electrically conductive strand also provides a

.5



- 27 -

cathodic segment when said electrically conductive strand becomes exposed to water upon immersion of the artificial lure therein.

5

20. The artificial lure of claim 19 wherein the cathodic segment of said electrically conductive strand is coupled electrically to said anodic segment of said electrically conductive strand.

5

21. The artificial lure of claim 17 wherein said body is formed from an electrically insulating material.

22. A bioelectric simulating skirt adapted to be secured to an artificial lure comprising:

a plurality of fine, electrically conductive strands each having:

5

an anodic segment, formed by an anodic material, that is located along said electrically conductive strands where said anodic segment becomes exposed to water upon immersion of the skirt therein; and

10

a cathodic segment, formed by a cathodic material, that is also located along said electrically conductive strands where said cathodic segment becomes exposed to water upon immersion of the skirt therein, and that is separated from the anodic segment;

15

upon immersion of the skirt into water said electrically conductive strands producing an electromagnetic field about the skirt to induce a strike response in fish.

23. The skirt of claim 22 wherein said electrically conductive strands further comprise an insulating segment, formed by an electrically insulating material, that is located along said electrically conductive strands between said anodic segment and said cathodic segment where said insulating segment becomes exposed to water upon immersion of the skirt therein for insulating said electrically conductive strand thereabout from electrical contact with the water.

24. A bioelectric simulating bait spear adapted for attachment to an artificial lure comprising:

at least one electrically conductive strand adapted for insertion into an artificial lure, said electrically conductive strand having:

an anodic segment, formed by an anodic material, that is located along said electrically conductive strand where said anodic segment becomes exposed to water upon immersion of the bait spear therein; and

a cathodic segment, formed by a cathodic material, that is also located along said electrically conductive strand where said cathodic segment becomes exposed to water upon immersion of the bait spear therein, and that is separated from the anodic segment;

upon immersion of the bait spear into water said electrically conductive strand producing an electromagnetic field about the bait spear to induce a strike response in fish.

- 25. The bait spear of claim 24 wherein said electrically conductive strand further comprise an insulating segment, formed by an electrically insulating material, that is located along said electrically conductive strand between said anodic segment and said cathodic segment where said insulating segment becomes exposed to water upon immersion of the bait spear therein for insulating said electrically conductive strand thereabout from electrical contact with the water.
- 26. The bait spear of claim 24 wherein said electrically conductive strand is U-shaped with the anodic segment and cathodic segment located respectively on parallel arms of the U-shaped electrically conductive strand, the U-shape of the electrically conductive strand being adapted for piercing through the artificial lure.
 - 27. A bioelectric simulating artificial lure comprising: a solid body having:

an anodic segment, formed with an anodic material, that is located on the body where said anodic segment

10

15

becomes exposed to water upon immersion of the artificial lure therein; and

a cathodic segment, formed with a cathodic material, that is also located on the body where said cathodic segment becomes exposed to water upon immersion of the artificial lure therein, and that is separated from the anodic segment;

upon immersion of the artificial lure into water the anodic segment and cathodic segment producing an electromagnetic field about the artificial lure to induce a strike response in fish.

28. The artificial lure of claim 27 wherein said body is formed from an electrically insulating material.

29. The artificial lure of claim 28 wherein said body includes electrically conductive material that interconnects the anodic segment with the cathodic segment.

- 30. The artificial fune of claim 27 wherein the anodic material is embedded within porous material that forms at least a portion of said body.
- 31. The artificial lure of claim 27 wherein the cathodic material is embedded within porous material that forms at least a portion of said body.
- 32. The artificial lure of claim 27 further comprising a conductivity-enhancing material which becomes exposed to water upon immersion of the artificial lure therein for increasing electrical conductivity of water about the artificial lure.

33. The artificial lure of claim 27 wherein the anodic segment of the artificial lure is replaceable.

34. The artificial lure of claim 33 wherein a replaceable fishhook provides the anodic segment of the artificial lure.

10

15

35. The artificial lure of claim 27 wherein the cathodic segment of the artificial lure is replaceable.

36. The artificial lure of claim 35 wherein a replaceable fishhook provides the cathodic segment of the artificial lure.

37. A bioelectric simulating sticker adapted to be fastened to an artificial lure comprising

a sheet of material that includes securing means for fastening said sheet to the artificial lure, said sheet having:

an anodic segment, formed with an anodic material, that is located on the sheet where said anodic segment becomes exposed to water upon immersion of the sheet therein; and

a cathodic segment, formed with a cathodic material, that is also located on the sheet where said cathodic segment becomes exposed to water upon immersion of the sheet therein, and that is separated from the anodic segment;

upon immersion of the artificial lure having the sticker fastened thereto into water the anodic segment and cathodic segment produce an electromagnetic field about the artificial lure to induce a strike response in fish.

38. The artificial lure of claim 37 wherein the securing means is a layer of adhesive material coated onto a surface of said sheet.

39. The artificial lure of claim 37 wherein a portion of said sheet between the anodic segment and the cathodic segment includes an electrically insulating material.

40. A bioelectric simulating fishhook comprising: an electrically conductive pend;

a point formed at a first end of the bend;

an electrically conductive shank extending from a second end of the bend distal from said point, said shank also having an eye formed at an end thereof that is distal from the bend;



15

5

10

WO 99/55150

extension hardware coupled to the eye that adapts the fishhook for coupling to a fishing line; and

self-contained bioelectric simulating means one portion of which is located at said extension hardware and another portion of which is located elsewhere on the fishhook, said bioelectric simulating means upon being immersed in water producing an electromagnetic field about the fishhook to induce a strike response in fish.

41. The fishhook of claim 40 wherein said bioelectric simulating means includes:

an anodic segment, formed by an anodic material, that is located on the extension hardware where said anodic segment becomes exposed to water upon immersion of the fishhook therein; and

a cathodic segment, formed by a cathodic material, that is located along the fishhook separated from said extension hardware where said cathodic segment becomes exposed to water upon immersion of the fishhook therein.

42. The fishhook of claim 41 further comprising an insulating segment, formed by an electrically insulating material, that is located along the fishhook between said anodic segment and said cathodic segment where said insulating segment becomes exposed to water upon immersion of the fishhook therein for insulating the fishhook thereabout from electrical contact with the water.

43. A bioelectric simulating trailer rod adapted to be secured to a bend of a fishhook, the trailer rod comprising:

a shank adapted for having an eye formed at one end thereof for securing the trailer rod to the bend of the fishhook; and

self-contained bioelectric simulating means located on the trailer rod, said bioelectric simulating means upon being immersed in water producing an electromagnetic field about the trailer rod to induce a strike response in fish.



44. The trailer rod of claim 43 wherein said bioelectric simulating means includes:

an anodic segment, formed by an anodic material, that is located on the trailer rod where said anodic segment becomes exposed to water upon immersion of the trailer rod therein; and

a cathodic segment formed by a cathodic material, that is located on the trailer rod separated from the anodic segment where said cathodic segment becomes exposed to water upon immersion of the trailer rod therein.

10

- 45. The trailer rod of claim 44 wherein said shank is electrically conducting.
- 46. The trailer rod of claim 45 further comprising an insulating segment, formed by an electrically insulating material, that is located along the trailer rod between said anodic segment and said cathodic segment where said insulating segment becomes exposed to water upon immersion of the trailer rod therein for insulating the trailer rod thereabout from electrical contact with the water.
- 47. The trailer rod of claim 44 wherein said shank has an eye formed thereon which provides an opening sufficiently large so the point and barb of a fishhook will pass therethrough.